

**ABSTRACT**

A system for enabling an electric arc welder adapted to perform various welding processes using weld parameters and a welding wire. The system comprises a first receptacle for a first memory button having a chip loaded with digital data indicative of a specific welding procedure specification constituting a set of at least weld parameters, a specific weld process, electrical characteristics, and selected welding wire features; a second receptacle for a second memory button having a chip loaded with digital data indicative of recorded features of welding wire loaded onto the welder; and, a disable circuit to disable the welder to process the specific welding procedure when the data indicative of recorded features of the welding wire fails to correspond with the data indicative of the selected welding wire features.